

The School's proposed TOW training strategy will add to the present requirement for TOW gunners-- which is to qualify on the M70 training device --by introducing a series of MILES gunnery tables and situational training exercises (STXs) that will qualify individuals and crews.

These tables and STXs (see chart) were designed to be sequential and progressive with specific, measurable standards for the qualification events. They also provide for the integration of the precision gunnery training system (PGTS) and advanced gunnery. If the strategy is fielded, a TOW gunner will be required to fire Table 5 successfully to be qualified or verified. This table, which contains a mix of Tables 2-4, is a pure MILES gunnery table containing six TOW MILES shots at armored vehicle targets that are at various ranges and moving at variable speeds. It is best when used on the multi-purpose range complex (MPRC) but is adaptable to almost any home station situation. Four of six hits for qualification should be a reasonable indicator of gunnery proficiency on a clear battlefield and a logical building block to

the higher levels of proficiency. The M70 training device will continue to be used to train and sustain tracking and point-of-aim skills.

The focus of the crew qualification STXs is on gunnery, battle drills, and tactics. The scoring of the STXs is

TOW Tables and STXs

Table 1:	Gunnery Training (M70)
Table 2-4:	Preliminary Gunnery Qualification Tables (MILES)
Table 5:	Gunner Qualification (MILES)
Table 6:	Advanced Gunnery (PGTS, when fielded)
Table 7:	Squad Intermediate STX
Table 8:	Squad Qualification STX
Table 9:	Section Intermediate STX
Table 10:	Section Qualification STX
Table 11:	Platoon Intermediate STX
Table 12:	Platoon Qualification STX

based upon the successful accomplishment of individual, crew, and leader tasks.

An in-house validation is now being conducted at Fort Benning on the proposed MILES tables and STXs. Part of this validation will involve the use of live TOW missiles to confirm that the new strategy will result in more live missile hits against uncooperative moving targets than are achieved with the present strategy.

If the new strategy does show a significant increase in TOW effectiveness with live missiles, we will begin an external validation process: A light MTOE unit and a heavy MTOE unit will be asked to use the strategy in preparing for their rotations through the JRTC and the NTC, respectively. Then, while the units are at the training centers, their TOW performance will be compared with that of like units that have not used the strategy. (Additional information on the TOW training strategy is available from the Enlisted Training Branch, DOTD, USAIS; AUTOVON 835-1612/1788.)

If this external validation proves that the new strategy does lead to the attainment of higher TOW standards, it will be implemented throughout the Army in 1989.

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Light Infantry FDC

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In an infantry battalion mortar platoon, its fire direction center is also its nerve center. If the FDC is to provide responsive and effective indirect fire support, it must be configured so as to facilitate the rapid and accurate computing of fire control data.

With the advent of the light infantry concept and the introduction of the

high mobility multi-purpose wheeled vehicle (HMMWV), the FDC in a light infantry battalion was moved from the M561 Gamma Goat to the HMMWV but without a specific configuration or standing operating procedure for its organization in that vehicle.

The mortar platoon of the 4th Battalion, 27th Infantry, 25th Infantry

Division (Light) has developed an FDC structure that not only meets the battalion's needs but also complements the light infantry's streamlined, rapid deployment characteristics.

In developing an effective FDC configuration for the HMMWV, the battalion had to meet a number of key requirements:

- First and foremost, the FDC had to be functional for the mortar computer personnel.

- After modification, the vehicle had to be as deployable as the original standard HMMWV model.

- All available space had to be used to the fullest, because the vehicle had to accommodate its entire crew and all its equipment.

- According to battalion SOP, the FDC also had to be able to serve as the alternate battalion tactical operations center (TOC) in emergencies.

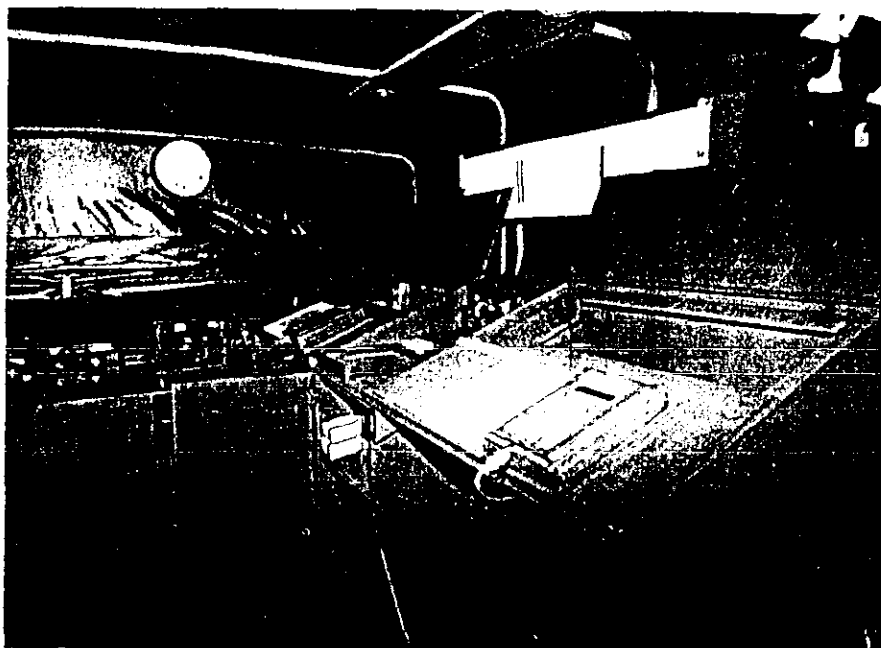
- All of these requirements had to be met without any structural changes that might cause permanent damage to the HMMWV.

- Finally, no programmed funds were allocated for the development; modifications had to be paid for with the unit's existing funds.

The most significant modification the platoon made to the HMMWV was the addition of a double work desk along the right side of the entire cargo area. The desk consists of two side-by-side work stations separated by a storage cabinet. The chief computer occupies the left or forward station and the check computer works at the right or rear station. This allows for an easy comparison of data between the two computers.

Each station desk top is built at approximately a 30-degree angle to provide optimum work space for the computers. The electronic mortar ballistic computers (MBCs) are mounted at the lower right corner of each work station desk top, which leaves the left and center of each station for manuals, papers, and the like. Frames made of wooden molding prevent the MBCs from shifting or falling while the vehicle is in motion but allow them to be removed easily.

The upper half of the desk top of each work station is hinged to allow access to the personal equipment storage areas inside. As only the upper half opens, this does not interfere with computing or other work. Beneath the desk at each work station is a secure storage area for the M16 plotting boards that are kept as backups for the MBCs.



Interior of FDC vehicle showing double work desk, storage areas, and battalion information board.

The storage cabinet between the work stations is ideal for storing PVS-5 night vision goggles, manuals, computer records, and any additional supplies required to run an efficient FDC. The TA-312 telephone to the firing guns, located on top of the storage cabinet between the two computers, is mounted in the same manner as the MBCs. The top of the storage cabinet also makes an ideal location for pencils, pens, paper, and other expendable supplies.

Above the desk, mounted to the canvas support bows, is the FDC's battle information board. All pertinent data and information such as call signs, unit locations, ammunition levels, and gun squad status are conveniently kept here. The board is divided into three sections and hinged for storage during transport.

Two 24-volt lights, controlled by an on-off switch to the vehicle batteries, are mounted on a board above the desk to provide ample light where it is needed. (These lights were secured from a "washed-out" maintenance contact van.)

Opposite the desk and mounted on the left canvas wall of the vehicle is a mapboard (covered with acrylic plastic), which is used for recording targets and plotting reference points and unit locations. A swing-arm, 24-volt

lamp, purchased locally from the post exchange, is attached to the top of the mapboard and is also connected to the vehicle's electrical system.

Forward of the mapboard behind the driver's seat is a weapon rack for storing the crew's four M16 rifles. The rack, originally in a Gamma Goat, is held in place with one-and-one-half-inch cotton tie-down straps and can be removed easily. A battery-operated clock on the canvas behind the cab completes the interior modifications.

The platoon also made several additions to the exterior of the vehicle to speed the mortar platoon's occupation and setup process. A removable canvas cover (SOP for all battalion vehicles) attaches to the front windshield with velcro straps. This is vital when the vehicle must be camouflaged or light discipline must be enforced. Similar covers for the driver and passenger windows attach in the same way. Steps from a two-and-one-half-ton truck were cut down and clasps added so that a small ladder easily attaches to the rear of the HMMWV.

A DR-8 roll and an RL-39 spool mounted on a one-by-two-foot board are hung on the right rear of the vehicle as soon as the vehicle moves into position. A preset hot loop, already



Exterior of vehicle showing canvas covers on windows and spool of wire on right rear.

spliced into the wire, allows the platoon's wire communications net to be set up within minutes of arrival. This hot loop attaches to the TA-312 telephone mounted inside the vehicle. The vehicle panels immediately behind the driver and passenger doors

were replaced with plywood doors to provide additional storage space for the crew's rucksacks, rations, water cans, and fuel cans.

All of these modifications to the HMMWV were completed in less than 40 man-hours, and all materials, with

the exception of the swing-arm lamp, were obtained through the supply system. An additional AN/GRC-160 radio (with a secure capability) was added to the FDC vehicle not only to allow the platoon to operate on the battalion command net but also to give a built-in redundancy if the FDC has to be used as the alternate battalion TOC.

This FDC vehicle effectively fills the needs of the battalion's mortar platoon. The FDC now has a place for everything, and when fully loaded, everything is in its place. The final product is a highly mobile, versatile, and efficient fire direction center that is easily deployable, cost effective, and built for the sustainment of combat operations.

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Resistance to Interrogation

CAPTAIN P. J. MULLINGS, British Army

If a soldier suddenly finds himself a prisoner of war, his first reaction usually is incredulity. He says, "This is not possible." But possible it certainly is. At this point, he is suffering from what is known as "the shock of capture."

Nobody has ever told him much about what to expect if he is captured. He may have been told that

only Special Forces and Rangers need to concern themselves with that sort of thing. He may have heard someone mention the Geneva conventions and name, rank, serial number, and date of birth, but it's all a little vague. Anyway, what does it matter? He doesn't have any information of value anyway.

It seems a shame that highly trained,

well motivated troops are so sadly lacking in training in "conduct after capture," as it is called in the British Army. How ironic for a highly trained paratrooper floating earthward, adrenaline pumping, ready to go "all the way" to land in the teeth of the enemy and find that his training stops there.

The shock of capture is not a disease